

Bangladesh: Country Experience on Low Carbon Development Initiatives and Participating in the PMI Readiness Support Program

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Bangladesh: Context and vulnerability

Riverine Flood

More intense

Drought

More frequent
Severe

Temperature

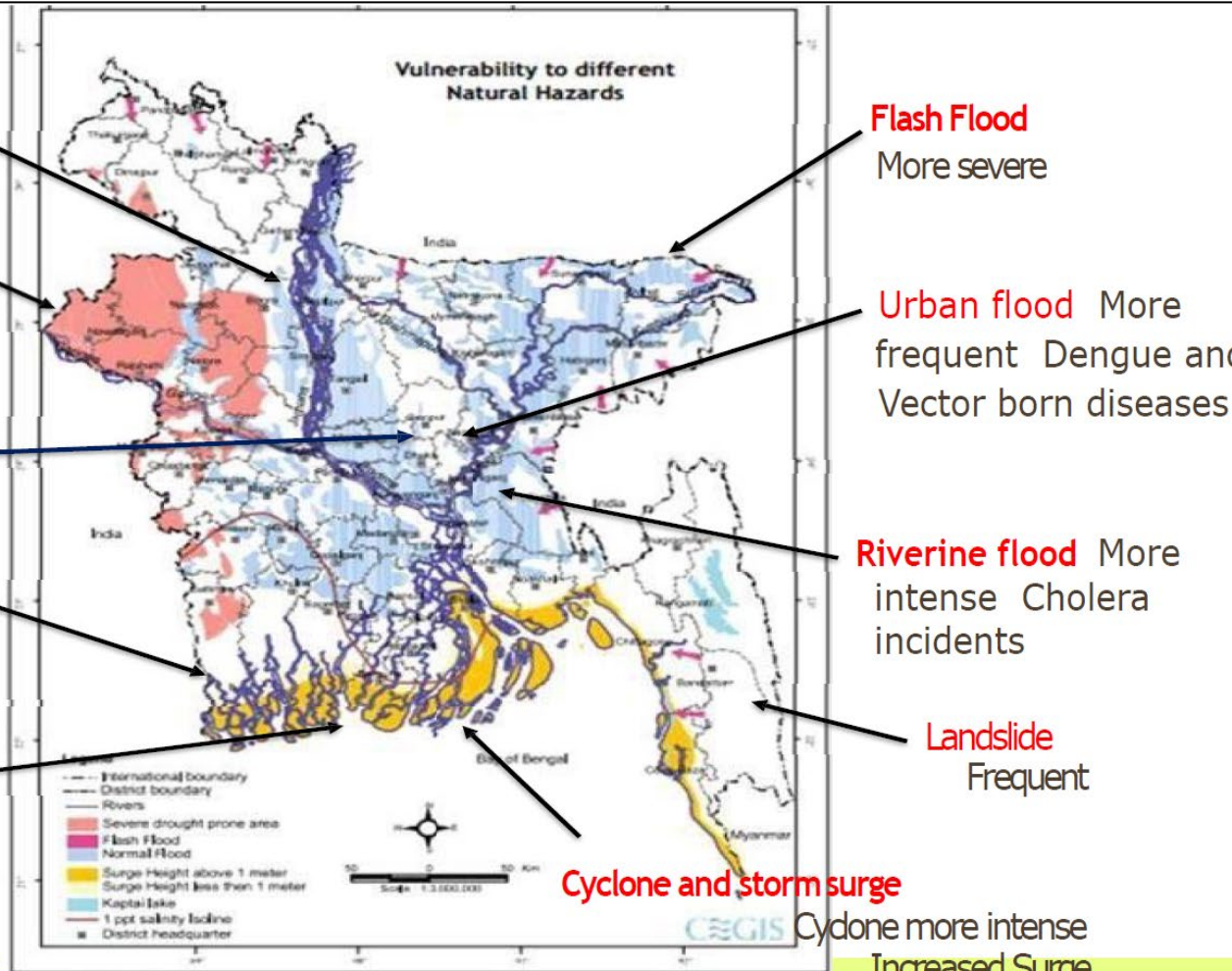
Heatwaves

Salinity

Increased
Cholera incidents

Sea level Rise

Continue to Rise



Cyclone and storm surge

Cyclone more intense
Increased Surge

Flash Flood

More severe

Urban flood

More frequent
Dengue and
Vector born diseases

Riverine flood

More intense
Cholera incidents

Landslide

Frequent

- ▶ An innocent victim of climate change.
- ▶ Global Climate Risk Index 2021 ranked Bangladesh 7th among the most vulnerable countries.
- ▶ Though, the country's contribution to global warming is negligible.
- ▶ Annual economic costs equivalent to 2% of its GDP by 2050, widening to 9.4% by 2100.
- ▶ Climate change has emerged as the biggest threat to sustainable development.

Low Carbon Development: Achievements & Initiatives

- Though contributing less than 0.47% of total global emissions, the country wants to actively play its part in the global collective action to reduce future GHG emissions.
- As an active member of UNFCCC, Bangladesh prepared and submitted its (I)NDC in 2015 well ahead of Paris COP21:

Unconditional Contribution

(assuming no additional international support)

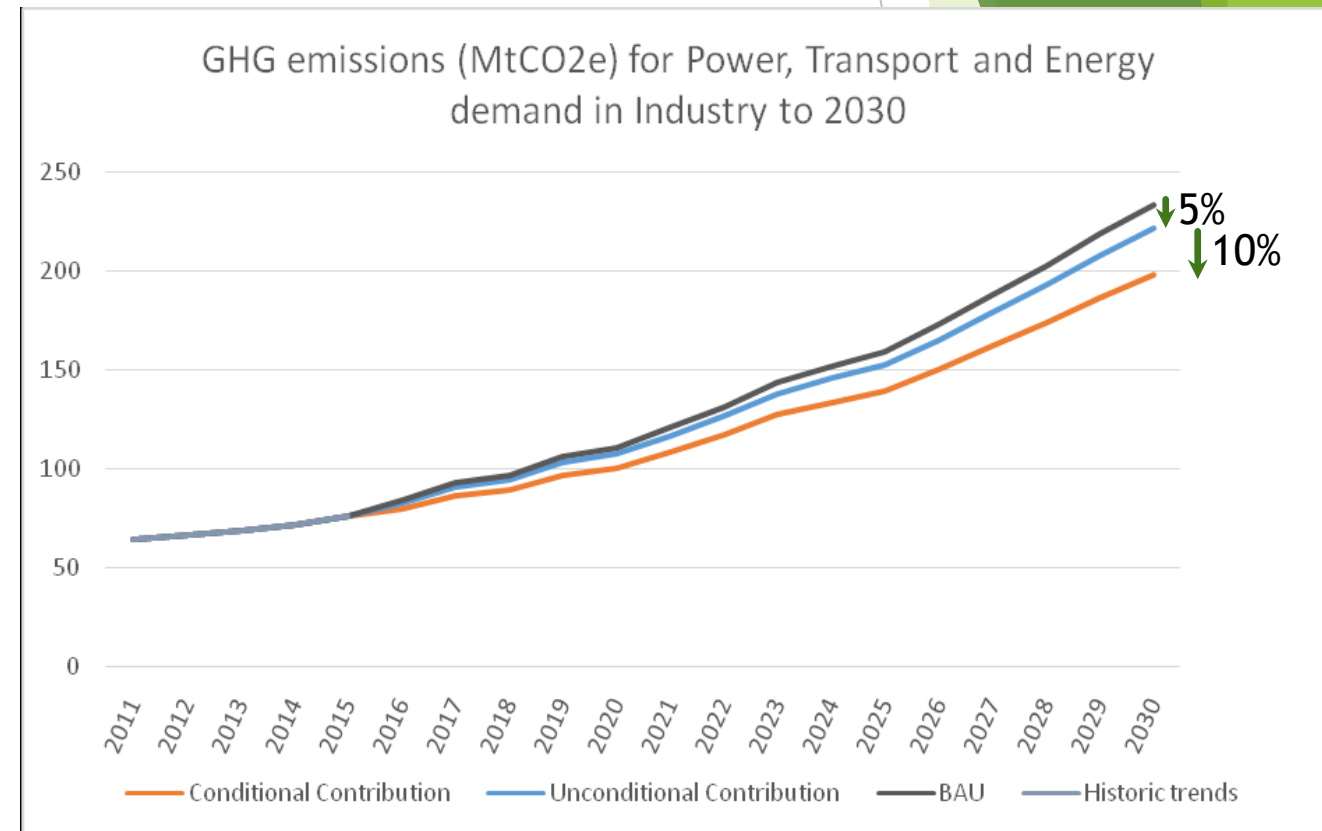


Conditional Contribution

(assuming additional international support)

Bangladesh will reduce its GHG emissions in the power, transport, and industry sectors by 12 MtCO₂e or 5% for those sectors.

Bangladesh will reduce its GHG emissions in the power, transport, and industry sectors by additional 24 MtCO₂e or 10% for those sectors

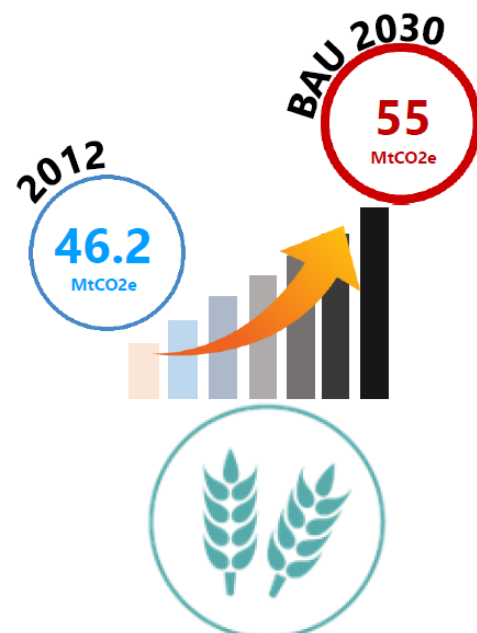


GHG Emission: Business As Usual Scenario under NDC Update 2021

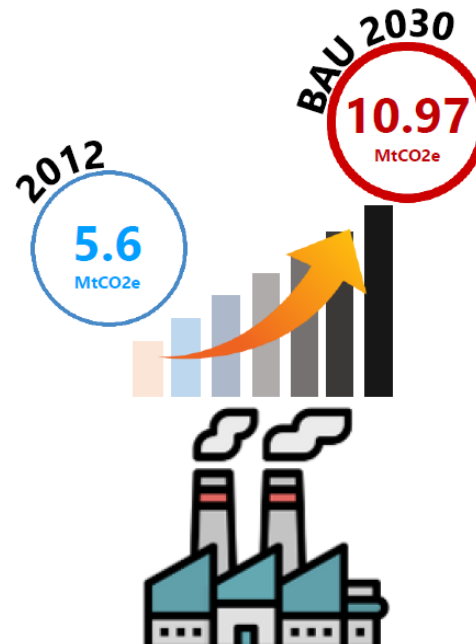
- ▶ Total Emission increases from **169 MtCO₂e to 409.4 MtCO₂e (BAU 2030)**
- ▶ Emission Increases at Energy Sector significantly from **93 MtCO₂e to 312.5 MtCO₂e**
- ▶ Highest emission is from Industry sector (**16.4 to 102 MtCO₂e**)
- ▶ **Other sectors contributes less in emission than energy sector**



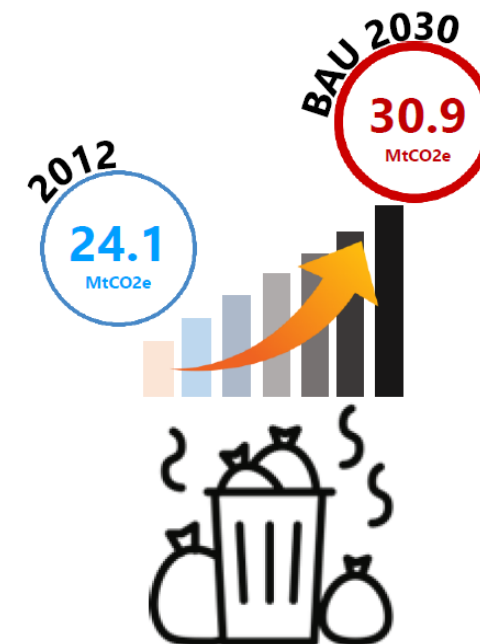
Energy



AFOLU

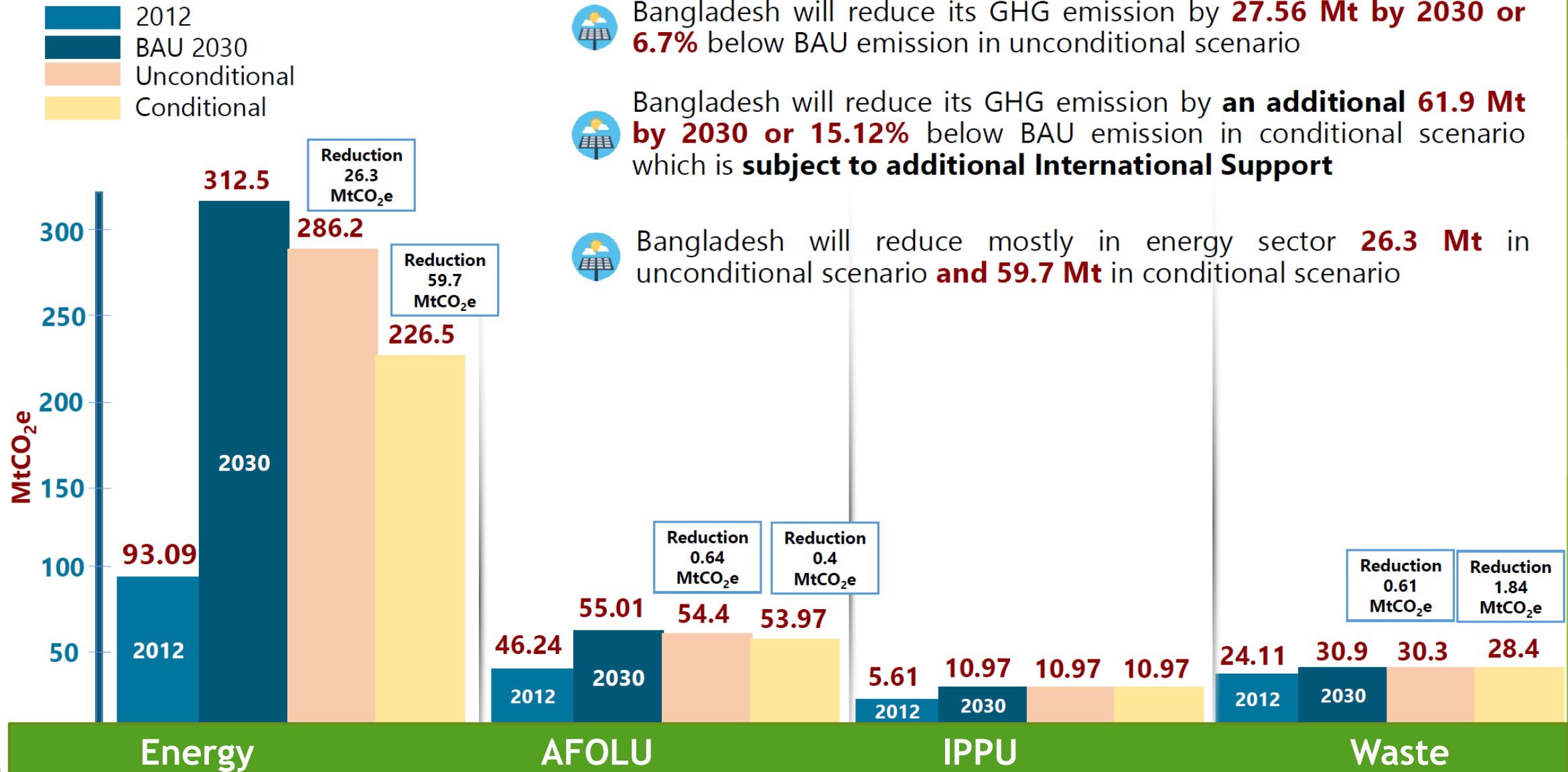


IPPU



Waste

Sector-wise Mitigation Contributions under NDC Update 2021



Bangladesh will reduce its GHG emission by **27.56 Mt by 2030** or **6.7%** below BAU emission in unconditional scenario

Bangladesh will reduce its GHG emission by **an additional 61.9 Mt by 2030** or **15.12%** below BAU emission in conditional scenario which is **subject to additional International Support**

Bangladesh will reduce mostly in energy sector **26.3 Mt** in unconditional scenario **and 59.7 Mt** in conditional scenario

Low Carbon Development: Achievements & Initiatives

- Supplementing the NDC targets, some of the major achievements and ongoing initiatives are -
 - We have installed more than 6.0 million Solar Home Systems (SHS) in off-grid areas (ensuring electricity access for 12% of its total population in remote areas. The program has been acclaimed as the largest off-grid renewable energy program in the world.)
 - Now giving further emphasis on solar mini-grid, solar irrigation, roof-top solar in special economic zones under National solar energy roadmap 2021-2041, already installed 7 solar parks, 27 solar mini-grids, 14 solar charging stations, 2550 solar irrigation pumps, etc. Other renewable sources like windmills, biomass, and biogas are also being utilized and upscaled.
 - Adopted Net Metering Guideline in 2018 and already installed 1620 rooftop Net Metering System.
 - We have distributed more than 4.5 million Improved Cook Stoves (ICS) in rural areas, and the program is ongoing under the National Action Plan for Clean Cooking.

Contd.

- A major transformation is underway in the transport sector shifting towards - Mass Rapid Transit (MRT), Bus Rapid Transit (BRT), and Express Way.
- Promoting green technology and achieving energy efficiency in industrial sectors are given special focus under the Energy Efficiency and Conservation Master Plan.
- Under Mujib Climate Prosperity Plan 2041, by securing international and other investment support, Bangladesh aim to reach 30% renewable energy by 2030 and up to 40% by 2041, with grid resilience and modernization. This flagship energy projects include the Bongoposagor Independence Array, one of the first large-scale hybrid RE-adaptation infrastructure projects that will revitalize a mangrove green belt to protect our threatened coastlines. As with strategic Energy Hubs, we will convert coal plants into green energy facilities such as hydrogen works.

Future Policy Directives: Vision 2041

- Recently Bangladesh has been recommended by the UN to graduate from LDC status. However, we will enjoy the LDC facilities till 2026 to ensure our smooth transition from LDC.
- The Government of Bangladesh adopted Vision 2041: Perspective Plan of Bangladesh, 2021-2041 with the aspiration of reaching Upper Middle-Income Country (UMIC) status by 2031 and becoming a High-Income Country (HIC) by 2041.
- The Strategic Goals and milestones of the Plan include industrialization with export-oriented manufacturing, a paradigm shifts from the rural agrarian economy to a primarily industrial and digital economy, while adopting a green growth strategy with integrated environment and climate change considerations.
- The Vision 2041 sees the green tax on fossil fuel consumption (carbon tax as 15% of fossil fuel price by 2041) as a useful policy (recognizing its potential to not only discourage the consumption of CO2 emitting fossil fuels but also encourage the adoption of green technology and private investment in renewable energy).

Future Policy Directives: Vision 2041

- In the first phase of implementation, under the 8th Five Year Plan (2020-2025), efforts are being made to build up institutional capabilities, policies and regulations.
- However, before adopting any carbon pricing instruments, we need to have a detailed study (in our hand) on the impact of Carbon Tax on the power, industry and transport sectors and the economy as a whole followed by extensive consultation with the relevant ministries/ divisions/ agencies and other stakeholders.
- Keeping this in mind, the Government of Bangladesh has engaged with the World Bank's Partnership for Market Implementation (PMI) program to explore the potentials and challenges of carbon pricing instruments and carry out readiness support activities.
- The MoEFCC submitted an EOI last year for participating in the World Bank's Partnership for Market Implementation (PMI) program.
- 'Readiness Support Plan (RSP)' has already been prepared for the World Bank's PMI program and is expected to be submitted soon through the Economic Relations Division (ERD) of Bangladesh Government.

Readiness Support Plan (RSP)

- US\$2 million, 3-year program.
- The RSP has three Workstreams:

Workstream A

- Establish arrangements for engagement with international carbon markets

Workstream B

- Develop economy-wide MRV and registry system

Workstream C

- Support readiness for carbon pricing instruments

Participating in Article 6 activities

- Bangladesh sees participating in the Article 6 Mechanisms as an opportunity that can help toward green growth strategy along with achieving Nationally Determined Contributions (NDCs) targets and promoting sustainable development.
- **Revenue generation:** boost the local economy of the country as a vehicle for foreign investment into the country for emission-reducing interventions.
- **Sustainable development co-benefits:** lower air pollution, increased energy security, and job creation
- **Technology transfer, capacity building or financing for higher cost mitigation measures.**

Workstream A: Enabling activities for participation in international carbon markets

- The main focus of Workstream A is establishing the arrangements necessary for Bangladesh to participate in the mechanisms under Article 6 of the Paris Climate Change Agreement.
- The main workstream **activities and milestones** will be:

Establishment of **Article 6 priorities and strategy**, such as the scope and ambition of Bangladesh's possible participation, based on stakeholder consultation.

Determination of **required institutional, governance and legal arrangements** to implement the strategy.

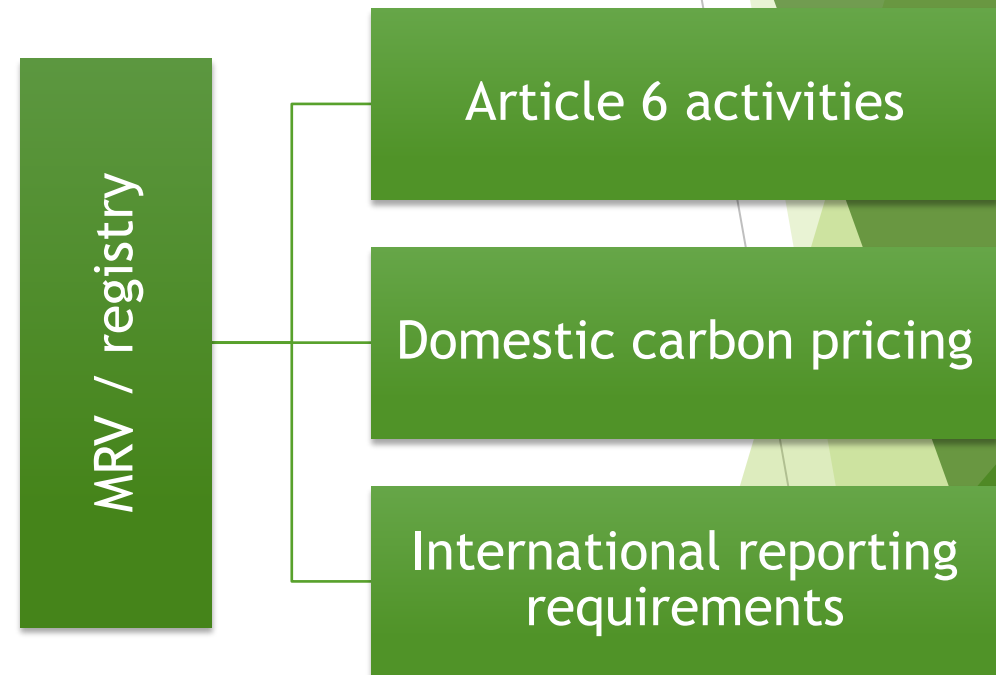
Development of **technical rules** to be applied, such as the selection and approval of project/program types that are eligible.

Establishment of the **requirement for systems** to enable Article 6 participation.

Capacity building, especially for prospective developers .

Need for development of an MRV and registry system

- Effective measurement, reporting and verification (MRV) of emissions and emissions reductions is critical to participate in Article 6 activities, implement domestic carbon pricing instruments, and to meet ETF requirements.



Workstream B: Development of economy-wide MRV and registry systems

- Workstream B concerns the establishment of an MRV system and registry.
- The main workstream activities and milestones will be:

Establishment of an MRV and registry system for Article 6

- The country could decide on **developing its own system** or **making use of existing set-ups or outsourcing** among other options.
- One option is to use the **open source registry system** offered by the World Bank.

Specification of further MRV and registry system development

- This will cover an **expanded scope of requirements**, for instance concerning future national carbon pricing policies (Workstream C) or relationship with emissions inventories/national statistics systems.
- The work will deliver the **specifications for future systems** (but their development and implementation would be beyond the scope of this RSP).

Workstream C: Analytical work to support assessment and development of domestic carbon pricing policy instrument/s

- Workstream C relates to new national carbon pricing policies
- The main workstream activities and milestones will be:

Establishment of the priorities for any future carbon pricing system, through cross-government consultation.

A readiness assessment on the feasibility that Bangladesh could introduce carbon pricing, to inform the development of future capacities and future policy decisions

Technical studies on policy interactions, economic impact, just transition, impact on trade and competitiveness etc. to inform policy design.

Wide stakeholder consultation on the options for carbon pricing.

Development of the institutional framework and legal gap analysis in the event a decision is made by the policy makers to proceed with carbon pricing.

Cross-cutting activities: enabling environment for carbon pricing & markets

➤ The following cross-cutting activities are included:

Establishment of a
**carbon pricing working
group** with workstream
sub-groups

**Capacity building and
Training**

**Extensive Consultations
on the decision of CPI**

**Knowledge
management and
communication plan on
Article 6, MRV system &
registry, CPI**

Thank You

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.